

Missouri Department of Natural Resources

Total Maximum Daily Load Information Sheet

Big Bottom Creek

Waterbody Segment at a Glance:

County: Ste. Genevieve
Nearby Cities: Rocky Ridge
Length of impairment: 0.5 miles
Pollutants: Biochemical Oxygen Demand (BOD) and Volatile Suspended Solids (VSS)
Source: Lake Forest Subdivision



State map showing location of watershed

Note: Entry reflects proposed change on the 2002 303(d) from “Nonfilterable Residue” to “Volatile Suspended Solids”

TMDL Priority Ranking: Low

Description of the Problem

Beneficial uses of Big Bottom Creek

- Livestock and Wildlife Watering
- Protection of Warm Water Aquatic Life and Human Health associated with Fish Consumption.

Use that is impaired

- Protection of Warm Water Aquatic Life

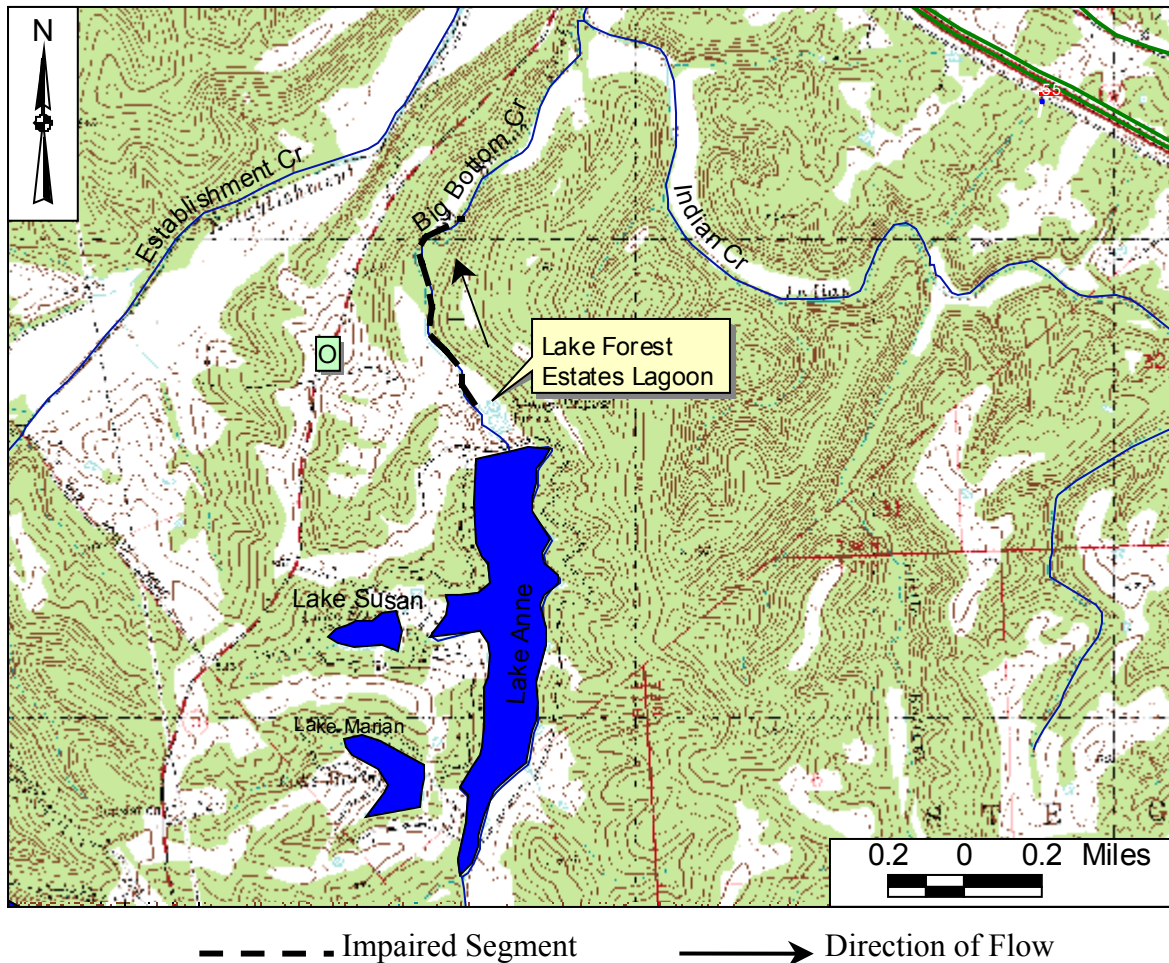
Standards that apply

- The Missouri Water Quality Standard (WQS), found in 10 CSR 20-7.031 Table A, for dissolved oxygen (related to BOD) in streams is 5.0 milligrams per liter (mg/L) or parts per million.
- The standards for volatile suspended solids (VSS) may be found in the general criteria section of the WQS at 10 CSR 20-7.031(3)(A) and (C). Here it states:
 - Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses.
 - Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses.”

Any waterbody that was listed for Non-Filterable Residue (NFR) in 1998 is now being listed as Volatile Suspended Solids (VSS). VSS are organic solids coming from wastewater treatment plants. The new listing gives a clearer picture of the specific pollutants affecting the water.

The Department of Natural Resources has made visual inspections of Big Bottom Creek below the Lake Forest Subdivision wastewater treatment plant (WWTP) twice during summer low flow conditions during the past five years. These inspections have shown a scarcity of aquatic life. In addition, almost all of the life forms that are present are tolerant of pollution. These conditions are characteristic of streams suffering from pollution from wastewater (or organic pollution). Like all wastewater discharges in Missouri, the Lake Forest WWTP has to meet the requirements of a discharge permit issued by Missouri Department of Natural Resources. Changes will be made to the discharge permit that will improve the quality of the wastewater discharge. This, in turn, will improve the water quality in Big Bottom Creek.

Big Bottom Creek near Rocky Ridge, Ste. Genevieve County



For more information call or write:

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